

ProductSKU: 279700

**ProductDescription:** FREP®Instrumentation,IndividualandOverallShielded,EPR,CPE,Volts:600V,ULTypeTC,No.of

Pairs:2,ConductorSize(AWG):18,ConductorStrands:7/.0152,Ratedat90°Cwetordry

**ProductCategory:** Instrumentation, Power, Control & Specialty-Instrumentation & Thermocouple Cables - 300 V & 600 V -

FREPInstrumentation, Shielded, EPR/CPEIndividual and Overall Shielded Pairs-Individual and Overall

ShieldedPairs18AWGConductors



## **ProductConstruction:**

CableType: • FREP®Instrumentation

ShieldType: • Shielded

InsulationType: • EPR

JacketType: • CPE

Volts: • 600V

Conductors: • ClassBstrandingperASTMB8

Tinned,annealedcopperperASTMB33

Insulation: • ColorCode:perICEAMethod1;pairs-blackandwhite.Oneconductorineachpairis

printedalpha-numericallyforeasyidentification

• Flame-retardantEthylenePropyleneRubber(EPR)TypeII

Jacket: • Flame-retardantthermoplasticChlorinatedPolyethylene(CPE)

Print: • GENERALCABLE®BICC®BRAND(WC)FREPXX/SPSXXAWGEPR/CPE

SHIELDEDULTYPETC90°CWETORDRY600VDIRBURSUNRES

MONTH/YEAROFMFGSEQUENTIALFOOTAGEMARK

Options: • Barecopperconductor

ClassCstranding

Cross-LinkedPolyethylene(XLPE)insulation

FREP300V-ULTypePLTC

 ${\bf \cdot} \ FREPII-flame-retardant, thermoplastic Low-Smoke, Zero-Halogen (LSZH) polyole find the properties of the proper$ 

jacket

• FREPII-XL-flame-retardant,thermosetLow-Smoke,Zero-Halogen(XL-LSZH)polyolefin

jacket

• FREP-XLflame-retardant,thermosetChlorinatedPolyethylene(XL-CPE)jacket

Otherconstructions available upon request

| No.ofPairs: -2  ConductorSize(AWG/kcmil): -18  ConductorStrand: -77.0152  MinimumAverageInsulation Thickness(in): -0.025  MinimumAverageInsulation Thickness(in): -0.64  MinimumAverageJacket Thickness(in): -0.045  MinimumAverageJacket Thickness(in): -0.045  MinimumAverageJacket Thickness(in): -0.045  MinimumAverageJacket Thickness(in): -0.0473  NominalCableOutsideDiameter (in): -0.473  NominalCableOutsideDiameter (in): -27.4  ApproximateCopperWeight(lbs per 1,000ft): -83  ApproximateNetWeight(lbsper 1,000ft): -83  ApproximateNetWeight(kgper 1,000ft): -124  IndividualandOverallShielded Pairs: -0.0473  Individualpairsare100% individually shielded withFlexfoil@aluminum/polyesterin contact with stranded tinned copper drain wire -0.0473  Individualpairsare100% individually shielded withFlexfoil@aluminum/polyesterin contact with stranded tinned copper drain wire -0.0473  Individualpairsare100% individually shielded withFlexfoil@aluminum/polyesterin contact with stranded tinned copper drain wire -0.0473  Individual pairs are 100% individually shielded withFlexfoil@aluminum/polyesterin contact with stranded tinned copper drain wire -0.0473  Individual pairs are 100% individually shielded withFlexfoil@aluminum/polyesterin contact with stranded tinned copper drain wire -0.0473  Individual pairs are 100% individually shielded withFlexfoil@aluminum/polyesterin contact with stranded tinned copper drain wire -0.0473  Individual pairs are 100% individually shielded withFlexfoil@aluminum/polyesterin contact with stranded tinned copper drain wire -0.0473  Individual pairs are 100% individually shielded withFlexfoil@aluminum/polyesterin contact with stranded tinned copper drain wire -0.0473  Individual pairs are 100% individually shielded withFlexfoil@aluminum/polyesterin contact with stranded tinned copper drain wire -0.0473  Individual pairs are 100% individually shielded withFlexfoil@aluminum/polyesterin contact with stranded tinned copper drain wire -0.0473  Individual pairs are 100% individual pairs are 100% individual pairs | <b>ProductSpecification:</b> |   |
|--|------------------------------|---|
| ConductorStrand: -7/.0152  | No.ofPairs:                  | • 2   |
| MinimumAverageInsulation Thickness(in):  MinimumAverageInsulation Thickness(in):  MinimumAverageJacket Thickness(in):  MinimumAverageJacket Thickness(in):  MinimumAverageJacket Thickness(in):  NominalCableOutsideDiameter (in):  NominalCableOutsideDiameter (in):  ApproximateCopperWeight(lbs per 1,000ft):  ApproximateNetWeight(lbsper 1,000ft):  ApproximateNetWeight(kgper 1,000ft):  StandardPackaging:  Perorderlength(pol)  IndividualandOverallShielded Pairs:  OverallShieldisFlexfoil@aluminum/polyesterincontactwithstrandedtinnedcopper contactwithstrandedtinnedcopper drainwire  OverallShieldisFlexfoil@aluminum/polyesterincontactwithstrandedtinnedcopper drainwire  Footnote:  UPC#:  O79407009121  SCC-14:  WeightPerUnitofMeasure:  O9913  ConductorSize(AWG):  1nfreeair,raceways,ordirectburialinaccordancewithNEC Inwetordrylocations  PermittedforuseinClassIDivision2industrialhazardouslocationsperNECArticle   | ConductorSize(AWG/kcmil):    | • 18  |
| Thickness(in):  MinimumAverageInsulation Thickness(im):  MinimumAverageJacket Thickness(in):  MinimumAverageJacket Thickness(in):  NominalCableOutsideDiameter (in):  NominalCableOutsideDiameter (in):  ApproximateCopperWeight(lbs per1,000ft):  ApproximateNetWeight(lbsper 1,000ft):  ApproximateNetWeight(ksper 1,000km):  IndividualandOverallShielded Pairs:  IndividualandoverallShie | ConductorStrand:             | • 7/.0152   |
| Thickness(mm):  MinimumAverageJacket Thickness(in):  MinimumAverageJacket Thickness(in):  NominalCableOutsideDiameter (in):  NominalCableOutsideDiameter (im):  ApproximateCopperWeight(lbs per1,000ft):  ApproximateNetWeight(Bsper 1,000ft):  ApproximateNetWeight(Bsper 1,000ft):  ApproximateNetWeight(kgper 1,000ft):  IndividualandOverallShielded Pairs:  Perorderlength(pol)  IndividualandOverallShielded Pairs:  OverallshieldisFlexfoil@aluminum/polyesterin contactwithstrandedtinnedcopperdrainwire  OverallshieldisFlexfoil@aluminum/polyesterincontactwithstrandedtinnedcopper drainwire  Footnote:  UPC#:  O79407009121  SCC-14:  O0079407009122  WeightPerUnitofMeasure: ConductorSize(AWG):  18  ProductInformation:  Applications:  Infreeair,raceways,ordirectburialinaccordancewithNEC Inwetordrylocations PermittedforuseinClassIDivision2industrialhazardouslocationsperNECArticle  |                              | • 0.025   |
| Thickness(in):  MinimumAverageJacket Thickness(mm):  NominalCableOutsideDiameter (in):  NominalCableOutsideDiameter (mm):  ApproximateCopperWeight(lbs per1,000ft):  ApproximateNetWeight(Ibsper 1,000ft):  ApproximateNetWeight(kgper 1,000km):  StandardPackaging:  IndividualandOverallShielded Pairs:  Perorderlength(pol)  IndividualandOverallShielded Pairs:  OverallshieldisFlexfoil@aluminum/polyesterincontactwithstrandedtinnedcopper drainwire  OverallshieldisFlexfoil@aluminum/polyesterincontactwithstrandedtinnedcopper drainwire  Footnote:  UPC#:  O79407009121  SCC-14:  O0079407009122  WeightPerUnitofMeasure:  O913  ConductorSize(AWG):  Infreeair,raceways,ordirectburialinaccordancewithNEC  Inwetordrylocations  PermittedforuseinClassIDivision2industrialhazardouslocationsperNECArticle   |                              | • 0.64  |
| Thickness(mm):  NominalCableOutsideDiameter (in):  NominalCableOutsideDiameter (mm):  ApproximateCopperWeight(lbs per1,000ft):  ApproximateNetWeight(kgper 1,000kn):  StandardPackaging:  IndividualandOverallShielded Pairs:  Perorderlength(pol)  IndividualandOverallShielded Pairs:  OverallshieldisFlexfoil@aluminum/polyesterincontactwithstrandedtinnedcopper drainwire  Footnote:  UPC#:  O79407009121  SCC-14:  WeightPerUnitofMeasure:  ConductorSize(AWG):  ProductInformation:  Applications:  Infreeair,raceways,ordirectburialinaccordancewithNEC invetorArticle  Invetordrylocations  PermittedforuseinClassIDivision2industrialhazardouslocationsperNECArticle   |                              | • 0.045   |
| (in):  NominalCableOutsideDiameter (mm):  ApproximateCopperWeight(Ibs per1,000ft):  ApproximateNetWeight(Ibsper 1,000km):  StandardPackaging:  IndividualandOverallShielded Pairs:  Perorderlength(pol)  IndividualandOverallShielded Pairs:  OverallshieldisFlexfoil@aluminum/polyesterincontactwithstrandedtinnedcopper drainwire  Footnote:  UPC#:  O79407009121  SCC-14:  WeightPerUnitofMeasure:  ConductorSize(AWG):  Applications:  Infreeair,raceways,ordirectburialinaccordancewithNEC  Inwetordrylocations  PermittedforuseinClassIDivision2industrialhazardouslocationsperNECArticle  |                              | • 1.14  |
| (mm):  ApproximateCopperWeight(lbs per1,000ft):  ApproximateNetWeight(lbsper 1,000ft):  ApproximateNetWeight(kgper 1,000km):  StandardPackaging:  IndividualandOverallShielded Pairs:  IndividualandOverallShielded Pairs:  OverallshieldisFlexfoil@aluminum/polyesterin contactwithstrandedtinnedcopperdrainwire  Footnote:  Dimensionsandweightsarenominal;subjecttoindustrytolerance.  UPC#:  O0079407009121  SCC-14:  O0079407009122  WeightPerUnitofMeasure:  O913  ConductorSize(AWG):  Infreeair,raceways,ordirectburialinaccordancewithNEC  Inwetordrylocations  PermittedforuseinClassIDivision2industrialhazardouslocationsperNECArticle   |                              | • 0.473   |
| per1,000ft):  ApproximateNetWeight(lbsper 1,000ft):  ApproximateNetWeight(kgper 1,000km):  StandardPackaging:  IndividualandOverallShielded Pairs:  OverallshieldisFlexfoil@aluminum/polyesterin contactwithstrandedtinnedcopperdrainwire  OverallshieldisFlexfoil@aluminum/polyesterincontactwithstrandedtinnedcopper drainwire  Footnote:  Dimensionsandweightsarenominal;subjecttoindustrytolerance.  UPC#:  O79407009121  SCC-14:  O0079407009122  WeightPerUnitofMeasure:  O0913  ConductorSize(AWG):  18  ProductInformation:  Applications:  Infreeair,raceways,ordirectburialinaccordancewithNEC  Inwetordrylocations  PermittedforuseinClassIDivision2industrialhazardouslocationsperNECArticle   |                              | • 12.01   |
| 1,000ft):  ApproximateNetWeight(kgper 1,000km):  StandardPackaging:  IndividualandOverallShielded Pairs:  OverallshieldisFlexfoil@aluminum/polyesterin contactwithstrandedtinnedcopperdrainwire  OverallshieldisFlexfoil@aluminum/polyesterincontactwithstrandedtinnedcopper drainwire  Footnote:  UPC#:  079407009121  SCC-14:  000079407009122  WeightPerUnitofMeasure:  0913  ConductorSize(AWG):  18  ProductInformation:  Applications:  Infreeair,raceways,ordirectburialinaccordancewithNEC  Inwetordrylocations  PermittedforuseinClassIDivision2industrialhazardouslocationsperNECArticle   |                              | • 27.4  |
| 1,000km):  StandardPackaging:  IndividualandOverallShielded Pairs:  Individualpairsare100%individuallyshieldedwithFlexfoil®aluminum/polyesterin contactwithstrandedtinnedcopperdrainwire  OverallshieldisFlexfoil®aluminum/polyesterincontactwithstrandedtinnedcopper drainwire  Footnote:  Dimensionsandweightsarenominal;subjecttoindustrytolerance.  UPC#:  00079407009121  SCC-14:  00079407009122  WeightPerUnitofMeasure:  0913  ConductorSize(AWG):  18  ProductInformation:  Applications:  Infreeair,raceways,ordirectburialinaccordancewithNEC  Inwetordrylocations  PermittedforuseinClassIDivision2industrialhazardouslocationsperNECArticle   |                              | • 83  |
| IndividualandOverallShielded Pairs:  Individualpairsare100%individuallyshieldedwithFlexfoil®aluminum/polyesterin contactwithstrandedtinnedcopperdrainwire  OverallshieldisFlexfoil®aluminum/polyesterincontactwithstrandedtinnedcopper drainwire  Footnote:  Dimensionsandweightsarenominal;subjecttoindustrytolerance.  UPC#:  079407009121  SCC-14:  00079407009122  WeightPerUnitofMeasure:  0913  ConductorSize(AWG):  18  ProductInformation:  Applications:  Infreeair,raceways,ordirectburialinaccordancewithNEC  Inwetordrylocations  PermittedforuseinClassIDivision2industrialhazardouslocationsperNECArticle  |                              | • 124   |
| Pairs: contactwithstrandedtinnedcopperdrainwire  OverallshieldisFlexfoil®aluminum/polyesterincontactwithstrandedtinnedcopper drainwire  Footnote: Dimensionsandweightsarenominal;subjecttoindustrytolerance.  UPC#: 079407009121  SCC-14: 00079407009122  WeightPerUnitofMeasure: .0913  ConductorSize(AWG): 18  ProductInformation:  Applications: Infreeair,raceways,ordirectburialinaccordancewithNEC  · Inwetordrylocations  · PermittedforuseinClassIDivision2industrialhazardouslocationsperNECArticle   | StandardPackaging:           | • Perorderlength(pol)   |
| UPC#: . 079407009121  SCC-14: . 00079407009122  WeightPerUnitofMeasure:0913  ConductorSize(AWG): . 18  ProductInformation:  Applications: . Infreeair,raceways,ordirectburialinaccordancewithNEC  · Inwetordrylocations  · PermittedforuseinClassIDivision2industrialhazardouslocationsperNECArticle   |                              | $contact with stranded tinned copper drainwire \\ \cdot Over all shield is Flex foil @aluminum/polyester in contact with stranded tinned copper \\$ |
| SCC-14: .00079407009122  WeightPerUnitofMeasure: .0913  ConductorSize(AWG): .18  ProductInformation:  Applications: .Infreeair,raceways,ordirectburialinaccordancewithNEC .Inwetordrylocations .PermittedforuseinClassIDivision2industrialhazardouslocationsperNECArticle  | Footnote:                    | ${\bf \cdot} \ Dimensions and weights are nominal; subject to industry to learn ce.$  |
| WeightPerUnitofMeasure: .0913  ConductorSize(AWG): .18  ProductInformation: Applications: .Infreeair,raceways,ordirectburialinaccordancewithNEC .Inwetordrylocations .PermittedforuseinClassIDivision2industrialhazardouslocationsperNECArticle  | UPC#:                        | • 079407009121  |
| ConductorSize(AWG):  ProductInformation:  Applications:  Infreeair,raceways,ordirectburialinaccordancewithNEC  Inwetordrylocations  PermittedforuseinClassIDivision2industrialhazardouslocationsperNECArticle  | SCC-14:                      | · 00079407009122  |
| ProductInformation:  Applications:  Infreeair,raceways,ordirectburialinaccordancewithNEC  Inwetordrylocations  PermittedforuseinClassIDivision2industrialhazardouslocationsperNECArticle   | WeightPerUnitofMeasure:      | • .0913   |
| Applications:  • Infreeair,raceways,ordirectburialinaccordancewithNEC  • Inwetordrylocations  • PermittedforuseinClassIDivision2industrialhazardouslocationsperNECArticle  | ConductorSize(AWG):          | • 18  |
| <ul> <li>Inwetordrylocations</li> <li>PermittedforuseinClassIDivision2industrialhazardouslocationsperNECArticle</li> </ul>   | ProductInformation:          |   |
|  | Applications:                | <ul> <li>Inwetordrylocations</li> <li>PermittedforuseinClassIDivision2industrialhazardouslocationsperNECArticle</li> </ul>                          |

Compliances: • IEEE383(70,000BTU/hr) OSHAacceptable ICEAT-29-520(210,000BTU/hr) · ICEAS-82-552-600V IEEE1202(70,000BTU/hr)CSAFT4 · ULSubject1277(70,000BTU/hr) · ULTypeTC-600V Features: Excellentmoistureresistance · Excellentelectrical, thermal and physical properties • Excellentflameresistance-burnstoanash; does not exhibit thermoplastic drip • Excellentlowtemperature coldbend characteristics Excellentresistancetocompressioncuts · Lowcoefficientoffrictionforeasypulling Meetscoldbendtestat-35°C Ratedat90°Cwetordry · Sunlight-andweather-resistant Packaging: · Material cuttolength and shipped out on non-returnable wood reels **TechnicalSpecifications** ReferenceStandards 2002NECChapter3ArticleConversionChart RecommendedHandling&StoragePractices VoltageDrop ACResistance&InductiveReactance CableInstallation <u>CommonColorSequence</u> CablePre-Installation <u>ShortCicuitCurrent</u> MetricConversion Glossary <u>EmergencyOverloadCurrent</u> <u>ConductorsforGeneralWiring</u> Jacket&InsulationMaterials <u>ConductorReferenceTable</u> Formula-CopperShield&Bonding(Grounding)Conductors <u>ICEAAmpacities</u> CableTesting NEC&CSADesignations CSATechnicalSection ChecklistforSpecifications



